What Is Claimed Is:

1. A liquid crystal display device, comprising:

a gate line having a first width formed extending along a first direction on a substrate;

a gate insulation film formed to cover the gate line;

a semiconductor layer formed on the gate insulation film;

a storage contact hole having a first width exposing a portion of the semiconductor layer; and

a pixel electrode having a first end portion extending along a second direction perpendicular to the first direction to electrically contact the semiconductor layer through the storage contact hole, the first end portion has a first length larger than the first width of the gate line,

wherein the first width of the storage contact hole is larger than the first width of the gate line.

2. The device according to claim 1, wherein the first end portion of the pixel electrode extends past the gate line by a first distance of about 6~7μm.

3. The device according to claim 1, wherein a thickness of the gate insulation film is about 4000Å and a thickness of the semiconductor layer contacting the pixel electrode is about 1000Å.

4. The device according to claim 1, further comprising a storage electrode formed on the semiconductor layer such that the pixel electrode contacts lateral portions of the storage electrode and the semiconductor layer.

5. The device according to claim 5, wherein a thickness of the gate insulation film is about 4000Å and a thickness of the semiconductor layer contacting the pixel electrode is about 1500Å.

6. The device according to claim 1, further comprising a thin film transistor formed in an intersection region of the gate line and the data line.

7. The device according to claim 6, wherein the thin film transistor comprises:

a gate electrode connected to the gate line;

a source electrode connected to the data line; and

a drain electrode connected to a second end portion of the pixel electrode.

8. The device according to claim 7, wherein the second end portion of the pixel electrode extends through the drain electrode to contact a portion of the semiconductor layer.

9. A method of fabricating a liquid crystal display device, comprising:

forming a gate line on a substrate using a first mask;

depositing a first insulation layer, a semiconductor layer, and a data metal layer on the substrate to cover the gate line;

forming a semiconductor layer by simultaneously patterning the first insulation layer, the semiconductor layer, and data metal layer using a second mask;

depositing a second insulation layer on the substrate to cover the semiconductor layer;

forming a first contact hole through the second insulation layer and the semiconductor layer by patterning the second insulation layer using a third mask; and

forming a pixel electrode on the second insulation layer to extend across the gate line using a fourth mask,

wherein a width of the first contact hole is larger than a width of the gate line.

10. The method according to claim 9, further comprising:

forming a gate electrode on the substrate using the first mask;

forming the semiconductor layer, a source electrode, and a drain electrode by simultaneously patterning the semiconductor layer and the data metal layer using the second mask; and

forming a second contact hole by patterning the second insulation layer using the third mask.

11. The method according to claim 9, further comprising forming a storage electrode by patterning the semiconductor layer and the data metal layer using the second mask.

12. The method according to claim 9, wherein the data metal layer includes at least one of a molybdenum (Mo) and an molybdenum alloy.

13. A method of fabricating a liquid crystal display device, comprising:

forming a gate line having a first width to extend along a first direction on a substrate;

forming a gate insulation film to cover the gate line;

forming a semiconductor layer on the gate insulation film;

forming a storage contact hole having a first width to expose a portion of the semiconductor layer; and

forming a pixel electrode having a first end portion to extend along a second direction perpendicular to the first direction to electrically contact the semiconductor layer through the storage contact hole, the first end portion has a first length larger than the first width of the gate line,

wherein the first width of the storage contact hole is larger than the first width of the gate line.

14. The method according to claim 13, wherein the first end portion of the pixel electrode extends past the gate line by a first distance of about 6~7μm.

15. The method according to claim 13, wherein a thickness of the gate insulation film is about 4000Å and a thickness of the semiconductor layer contacting the pixel electrode is about 1000Å.

16. The method according to claim 13, further comprising forming a storage electrode on the semiconductor layer such that the pixel electrode contacts lateral portions of the storage electrode and the semiconductor layer.

17. The method according to claim 5, wherein a thickness of the gate insulation film is about 4000Å and a thickness of the semiconductor layer contacting the pixel electrode is about 1500Å.

18. The method according to claim 13, further comprising forming a thin film transistor at an intersection region of the gate line and the data line.

19. The method according to claim 18, wherein forming the thin film transistor comprises:

forming a gate electrode to be connected to the gate line;

forming a source electrode to be connected to the data line; and

forming a drain electrode to be connected to a second end portion of the pixel electrode.

20. The method according to claim 19, wherein the second end portion of the pixel electrode extends through the drain electrode to contact a portion of the semiconductor layer.